



**William F. Martin**  
Mayor

City of  
**GREENFIELD, MASSACHUSETTS**

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**DEPARTMENT OF PUBLIC WORKS**

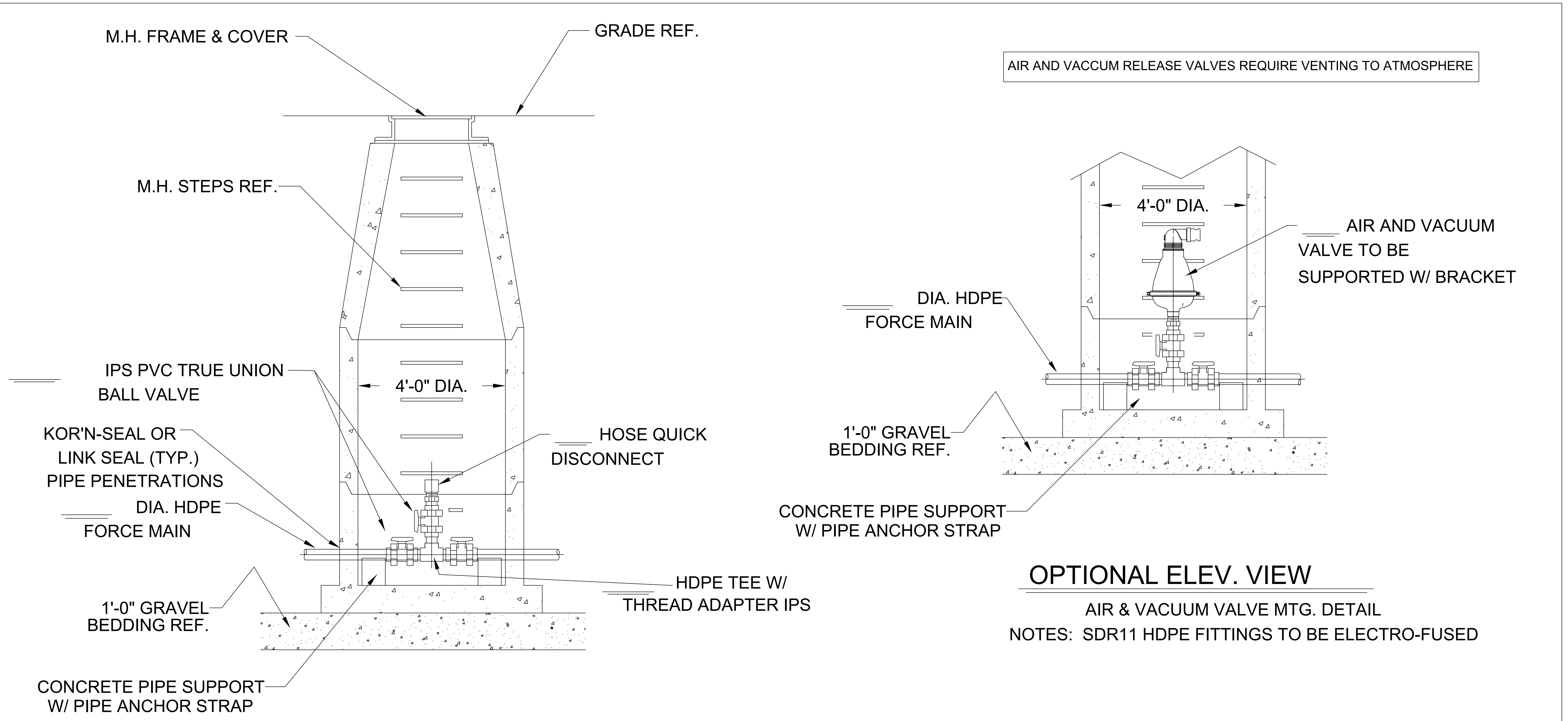
189 Wells Street, Greenfield, MA 01301  
Phone 413-772-1528  
DPW@greenfield-ma.gov • www.greenfield-ma.gov

**Materials for Pickett Lane Forced Sewer Main  
Contract DPW 19-26  
Addendum #1**

**March 29, 2019**

To all Bidders:

1. For further clarification on Item 6 – Cleanouts for Installation in Sewer Manholes, add the attached detail sheets under Specifications. The sewer manholes and optional air/vacuum release valves are not a part of this bid.



AIR AND VACCUM RELEASE VALVES REQUIRE VENTING TO ATMOSPHERE

AIR AND VACCUM VALVE TO BE SUPPORTED W/ BRACKET

**OPTIONAL ELEV. VIEW**

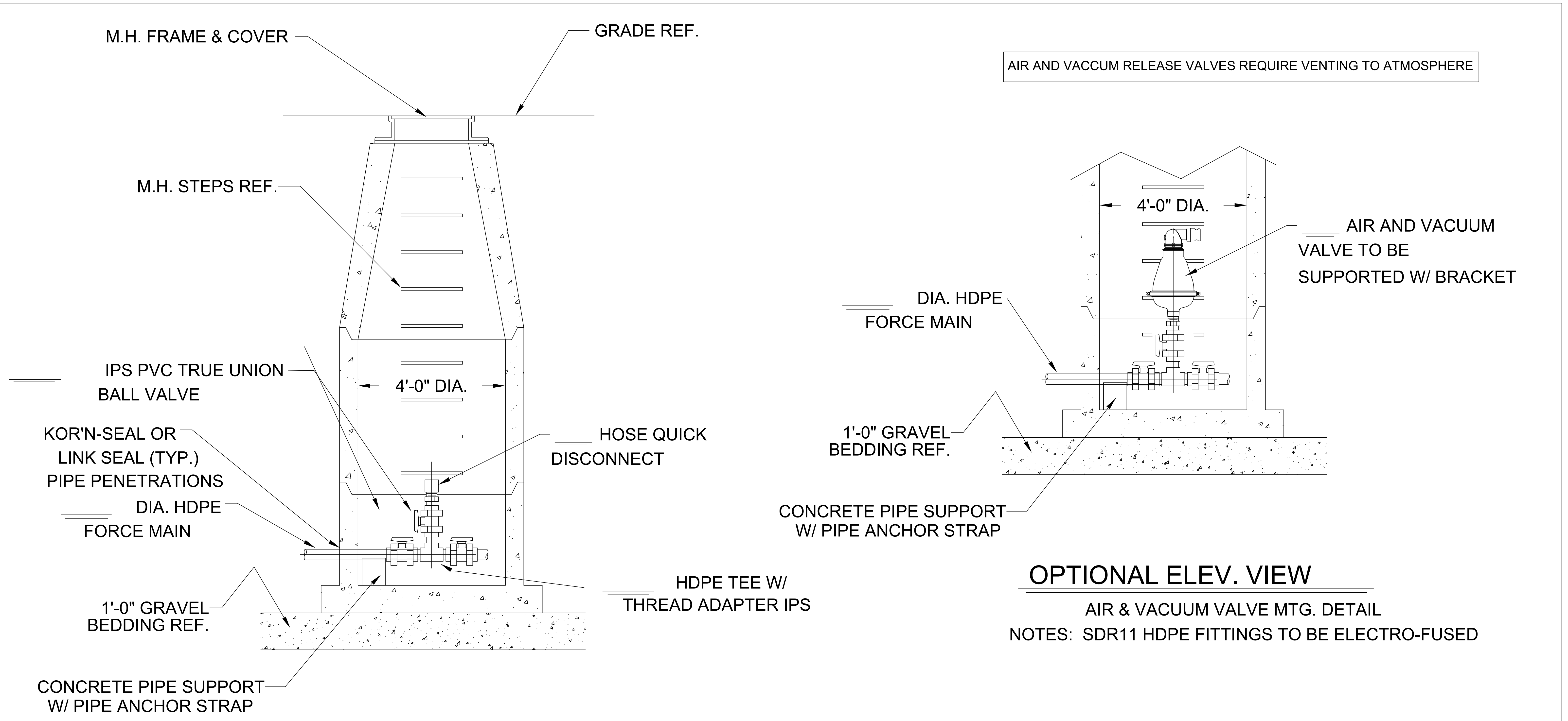
AIR & VACCUM VALVE MTG. DETAIL  
 NOTES: SDR11 HDPE FITTINGS TO BE ELECTRO-FUSED

**TYPICAL ELEV. VIEW**

REV.#	DESCRIPTION	BY:	DATE
3	Added note in upper right corner	mac	08/15/16
2	Added 2 valves	mac	11/6/14
1	Modified for ARI Air Relief Valve	arm	02/11/10

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO F. R. MAHONY & ASSOCIATES, INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

<b>F R M MAHONY</b> & associates, inc.		273 WEYMOUTH STREET ROCKLAND, MASSACHUSETTS 02370 (781) 982-9300 Fax: (781) 982-1056	
CUSTOMER/ENGINEER:			
PROJECT NAME:		PROJECT NO.:	
DESCRIPTION: IN-LINE FLUSHING M.H. DETAIL- HDPE SDR11 PIPING			
SCALE: NONE	DRAWN BY:	DRAWING NO.	
DATE:	CHK'D BY:	FRM-3B	



**TYPICAL ELEV. VIEW**

AIR AND VACCUM RELEASE VALVES REQUIRE VENTING TO ATMOSPHERE

**OPTIONAL ELEV. VIEW**

AIR & VACUUM VALVE MTG. DETAIL  
 NOTES: SDR11 HDPE FITTINGS TO BE ELECTRO-FUSED

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CUSTOMER/ENGINEER:			
PROJECT NAME:		PROJECT NO.:	
DESCRIPTION: TERMINAL FLUSHING M.H. DETAIL- HDPE SDR11 PIPING			
SCALE: NONE	DRAWN BY:	DRAWING NO.	
DATE:	CHK'D BY:	FRM-3A	

# Series 50M76

## 2-Piece Ball Valve

**SHARPE**<sup>®</sup>

Valves, Automation & Controls

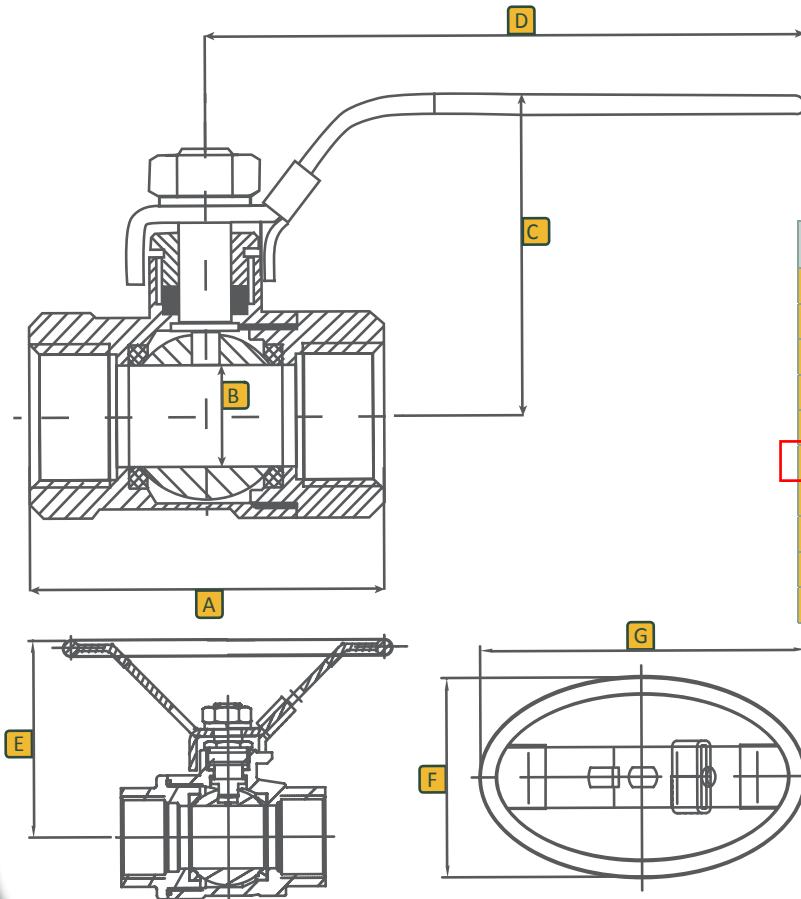
### Features

- Full port
- 1000 WOG
- 316 Stainless Steel
- Locking device
- Blow-out proof stem
- Oval handle available

CORPORATION STOP VALVES &  
Cleanout & Air/Vac. Access Valves



### Dimensions

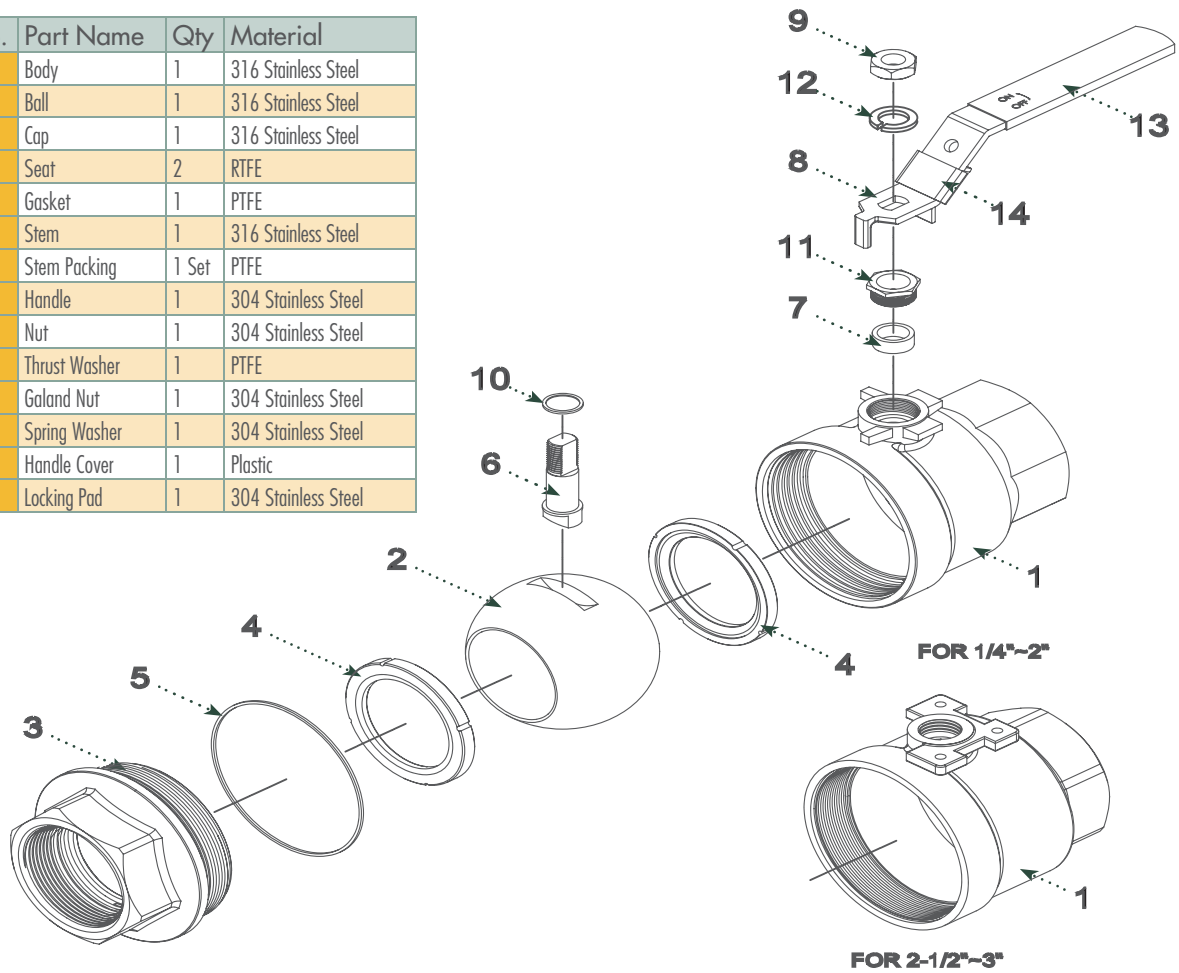


Dimensions (Inches)

Size	A	B	C	D	E	F	G
1/4	2.00	0.43	1.81	4.00	1.06	2.16	3.39
3/8	2.00	0.43	1.81	4.00	1.06	2.16	3.39
1/2	2.36	0.50	1.89	4.00	1.06	2.16	3.39
3/4	2.75	0.80	2.04	5.00	1.34	2.76	4.33
1	3.25	1.00	2.44	5.75	1.53	3.18	5.26
1-1/4	3.80	1.25	2.56	5.75	1.53	3.18	5.26
1-1/2	4.33	1.50	2.96	7.50	1.97	4.13	6.30
2	5.27	2.00	3.25	7.50	1.97	4.13	6.30
2-1/2	6.58	2.50	5.00	9.73	-	-	-
3	7.55	3.00	5.40	9.73	-	-	-

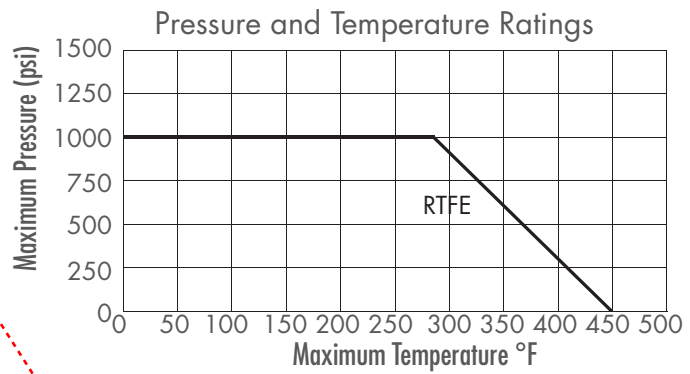
# Parts & Materials

No.	Part Name	Qty	Material
1	Body	1	316 Stainless Steel
2	Ball	1	316 Stainless Steel
3	Cap	1	316 Stainless Steel
4	Seat	2	RTFE
5	Gasket	1	PTFE
6	Stem	1	316 Stainless Steel
7	Stem Packing	1 Set	PTFE
8	Handle	1	304 Stainless Steel
9	Nut	1	304 Stainless Steel
10	Thrust Washer	1	PTFE
11	Galand Nut	1	304 Stainless Steel
12	Spring Washer	1	304 Stainless Steel
13	Handle Cover	1	Plastic
14	Locking Pad	1	304 Stainless Steel



## Technical Information

Size	Cv	Weight-Lbs
1/4	6	0.5
3/8	6	0.5
1/2	24	0.7
3/4	35	1.1
1	47	2.0
1-1/4	81	3.0
1-1/2	105	4.8
2	241	8.0
2-1/2	319	14.0
3	580	20.0



## Ordering

Fig: 1/2 - 50M76  
Description: 1/2" - Series 50M76

Size	Series	Options
1/4	1-1/4	50M76 OH Oval Handle
3/8	1-1/2	
1/2	2	
3/4	2-1/2	
1	3	

Cleanout and Air/Vacuum release Access Valves

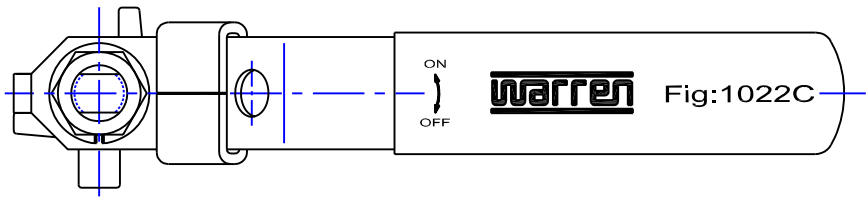
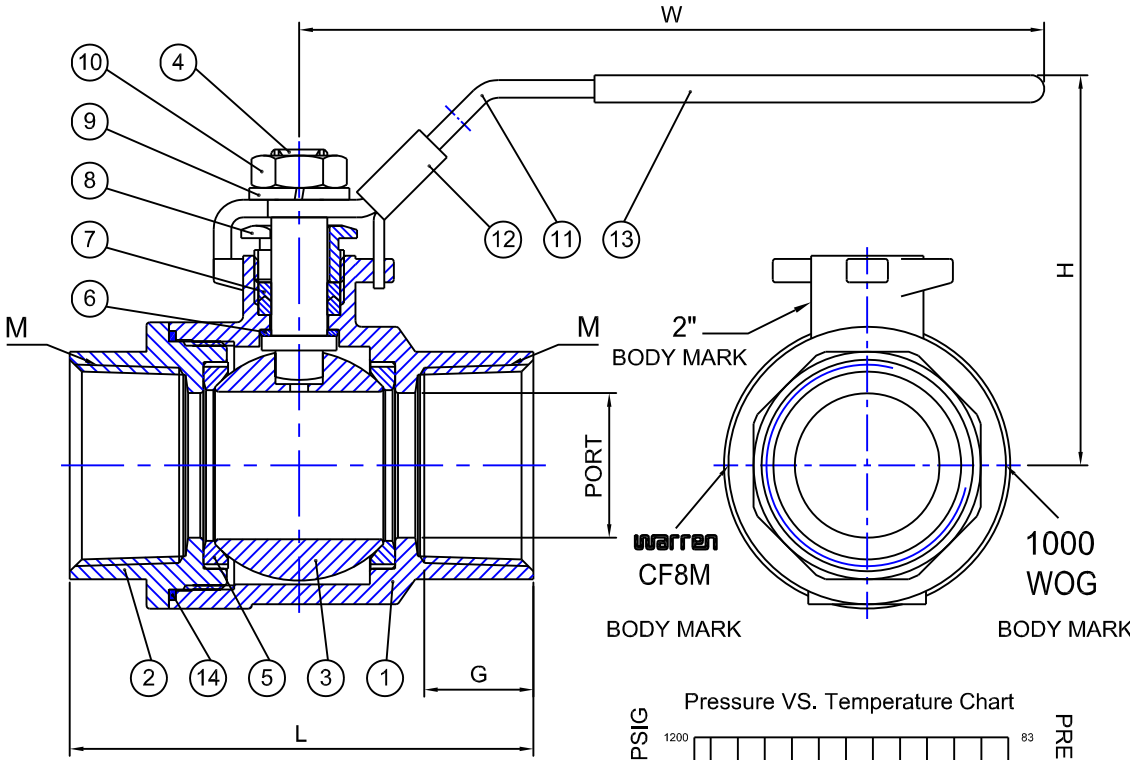


Fig No:

WARREN-1022C

MATERIAL LIST

NO.	PART NAME	MATERIAL	Q'TY
		STAINLESS STEEL	
1	BODY	ASTM A351-CF8M	1
2	CAP	ASTM A351-CF8M	1
3	BALL	ASTM A351-CF8M	1
4	STEM	ASTM A276-316	1
5	SEAT	RPTFE	2
6	THRUST WASHER	PTFE	1
7	STEM PACKING	PTFE	1SET
8	GLAND NUT	AISI SS304	1
9	SPRING WASHER	AISI SS304	1
10	NUT	AISI SS304	1
11	HANDLE	AISI SS304	1
12	LOCKING PAD	AISI SS304	1
13	HANDLE COVER	PLASTIC	1
14	GASKET	PTFE	1



STEAM RATING:  
150 PSI WSP

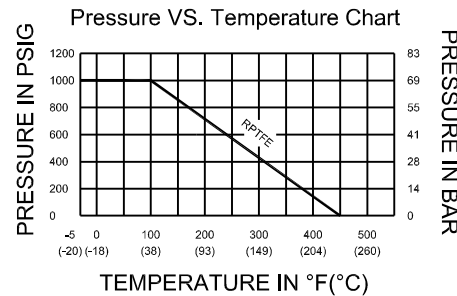
TEST PRESSURE:  
Shell (by Water), 1500 Psig  
Seat (by Air), 80 Psig

APPLICABLE STANDARDS:  
NPT Threads To ANSI B 1.20.1  
Inspection Per API 598

DIMENSIONS

SIZE		PORT	M	G	L	H	W	CV(GPM)	TORQUE(LBF-IN)	WEIGHT(LBS)
DN8	1/4"	0.39	NPT	0.43	1.93	1.71	3.23	22	26.55	0.35
DN10	3/8"	0.49	NPT	0.43	1.93	1.71	3.23	24	26.55	0.35
DN15	1/2"	0.63	NPT	0.53	2.31	1.89	3.23	37	53.11	0.53
DN20	3/4"	0.79	NPT	0.63	2.70	2.25	4.02	68	70.81	0.84
DN25	1"	0.96	NPT	0.73	3.09	2.65	5.00	109	106.21	1.41
DN32	1-1/4"	1.26	NPT	0.75	3.67	2.90	5.00	185	141.62	2.16
DN40	1-1/2"	1.50	NPT	0.79	4.06	3.33	6.38	268	177.02	3.48
DN25	2"	1.97	NPT	0.95	4.84	3.64	6.38	486	221.28	5.86

OPTIONAL CORPORATION STOP VALVE



	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN	CHANG	PETER CHEN	Ann	WARREN-1022C	ASTM A351-CF8M	INCH	TWO PIECES BALL VALVES THREADED END, FULL BORE, 1000 WOG
DATE	07/06/2012	07/06/2012	07/06/2012	REVISION 01	SCALE	FREE	